

| | | | | | |
|--|---|---|-------|-------------|--|
| Run on: | February 13, 2002, 10:09:32 ; Search time 12.87 Seconds (without alignments) 112.457 Million cell updates/sec | Structural polypyro insulin receptor - crumbs protein - f LDL receptor-relat long neutrotin 2 metallothionein 20 metallothionein 20 metallothionein 20 metallothionein 20 metallothionein 20 metallothionein 20 metallothionein 10 ferredoxin - Metha dnaj-related prote whey acidic protei keratin high sulfu | | | |
| Title: | US-09-486-094-12 | | | | |
| Perfect score: | 51 | | | | |
| Sequence: | 1 XCXXXXXXAXXAXXXX 19 | | | | |
| Scoring table: | BLOSUM62 | | | | |
| | Gapop 10.0 , Gapext 0.5 | | | | |
| Searched: | 219241 seqs, 76174552 residues | | | | |
| Total number of hits satisfying chosen parameters: | 219241 | | | | |
| Minimum DB seq length: 0 | | RESULT 1 | | | |
| Maximum DB seq length: 2000000000 | | JC2210 | | | |
| Post-processing: Maximum Match 10% | | hypothetical 12.6K protein, LIM6 - trumpet lily (fragment) | | | |
| Maximum Match 100% | | C;Species: Lilium longiflorum (trumpet lily) | | | |
| Listing first 45 summaries | | C;Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 21-Jul-2000 | | | |
| Database : | PIR-68: 1: Pir1: 2: Pir2: 3: Pir3: - 4: Pir4: - | C;Accession: JC2210 R;Robayashi, T.; Konayashi, B.; Sato, S.; Hotta, Y.; Miyajima, N.; Tanaka, A.; Tabata DNA Res 1, 15-26, 1994 A;Title: Characterization of cDNAs induced in meiotic prophase in lily microsporocyte A;Reference number: PC2136; MUID:96051386 A;Accession: JC2210 A;Status: preliminary | | | |
| | | A;Molecule type: mRNA A;Residues: 1-117 <ROB> A;Cross references: DDBJ:D21812; NID:9431165; PID:BA04836.1; PID:g431166 | | | |
| | | Query Match Score 29; DB 2; Length 117; Best local Similarity 56.9%; Pred. No. 35; Matches 4; Conservative 0; Mismatches 13; Indels 0; Gaps 0; | | | |
| | | Query 2 CXXXXXXAXXAXXXX 18 Db 74 CTTSSKCKRGVTCRK 90 | | | |
| | | RESULT 2 | | | |
| | | S59073 | | | |
| | | metallothionein isoform IIA - blue crab | | | |
| | | C;Species: Callinectes sapidus (blue crab) | | | |
| | | C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 07-May-1999 | | | |
| | | R;Brouwer, M.; Enghild, J.; Hoexum-Brouwer, T.; Thogersen, I.; Truncali, A. | | | |
| | | Biochem J. 311, 617-622, 1995 | | | |
| | | A;Title: Primary structure and tissue-specific expression of blue crab (Callinectes s | | | |
| | | A;Reference number: S59072; MUID:96033062 | | | |
| | | A;Accession: S59073 | | | |
| | | A;Molecule type: Protein | | | |
| | | A;Residues: 1-57 <ROB> | | | |
| | | C;Superfamily: metallothionein | | | |
| | | C;Keywords: metal binding | | | |
| | | Query Match Score 28; DB 2; Length 57; Best local Similarity 54.9%; Pred. No. 45; Matches 4; Conservative 0; Mismatches 13; Indels 0; Gaps 0; | | | |
| | | Query 2 CXXXXXXAXXAXXXX 18 Db 33 CSSECKCTSKKECSKTC 49 | | | |
| Result No.: | Score | Match Length | DB ID | Description | |
| 1 | 29 | 56.9 | 117 | 2 JC2210 | hypothetical 12.6 metallothionein is |
| 2 | 28 | 54.9 | 57 | 2 S59073 | hypothetical prote violaxanthin de-ep |
| 3 | 28 | 54.9 | 58 | 2 S59072 | hypothetical prote violaxanthin de-ep |
| 4 | 28 | 54.9 | 243 | 2 C75608 | hypothetical prote violaxanthin de-ep |
| 5 | 28 | 54.9 | 462 | 2 T00708 | hypothetical prote violaxanthin de-ep |
| 6 | 28 | 54.9 | 478 | 2 T03750 | hypothetical prote violaxanthin de-ep |
| 7 | 28 | 54.9 | 2948 | 2 T22664 | hypothetical prote metallothionein 1 |
| 8 | 27 | 52.9 | 58 | 1 SMKD1S | hypothetical prote metallothionein 1 |
| 9 | 27 | 52.9 | 565 | 2 T47330 | hypothetical prote alpha-2-macroglobu |
| 10 | 27 | 52.9 | 572 | 2 T20764 | alpha-2-macroglobu |
| 11 | 27 | 52.9 | 4543 | 1 A53102 | alpha-2-macroglobu |
| 12 | 27 | 52.9 | 4544 | 1 S02391 | alpha-2-macroglobu |
| 13 | 27 | 52.9 | 4545 | 1 S25111 | alpha-2-macroglobu |
| 14 | 26 | 51.0 | 57 | 1 SMKD1 | metallothionein 2 |
| 15 | 26 | 51.0 | 58 | 2 A37039 | metallothionein 1 |
| 16 | 26 | 51.0 | 58 | 2 S43367 | metallothionein - |
| 17 | 26 | 51.0 | 222 | 2 E71602 | hypothetical prote probable integral |
| 18 | 26 | 51.0 | 248 | 2 T03026 | hypothetical prote chitinase (EC 3.2. |
| 19 | 26 | 51.0 | 318 | 2 T19226 | extracellular prot tumor necrosis fac |
| 20 | 26 | 51.0 | 387 | 2 I38449 | epidermal growth f |
| 21 | 26 | 51.0 | 435 | 2 S40993 | hypothetical prote testicular metallo |
| 22 | 26 | 51.0 | 455 | 1 GQHUT1 | hypothetical prote presalk protein P |
| 23 | 26 | 51.0 | 493 | 2 JC5621 | structural polypro |
| 24 | 26 | 51.0 | 646 | 2 T23039 | |
| 25 | 26 | 51.0 | 721 | 2 T41942 | |
| 26 | 26 | 51.0 | 732 | 2 T52361 | |
| 27 | 26 | 51.0 | 1002 | 2 A26838 | |
| 28 | 26 | 51.0 | 1046 | 2 S37136 | |
| 29 | 26 | 51.0 | 1145 | | |

RESULT 3

S59072 metallothionein isoform Ia - blue crab
C;Species: Callinectes sapidus (blue crab)
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 07-May-1999
C;Accession: S59072
R;Brouwer, M.; Engels, J.; Hoexum-Brouwer, T.; Thogersen, I.; Truncali, A.
B;Title: Primary structure and tissue-specific expression of blue crab (*Callinectes sapi*
A;Reference number: S59072; MUID:96033062
A;Accession: S59072
A;Molecule type: Protein
A;Residues: 1-58 <BRO>
C;Superfamily: metallothionein
C;Keywords: metal binding

Query Match Score 28; DB 2; Length 58;
Best Local Similarity 23.5%; Pred. No. 46; Indels 0; Gaps 0;
Matches 4; Conservative 0; Mismatches 13; Indels 0; Gaps 0;

QY 2 CXXXXCXXXXCXXXXC 18
Db 33 CTSGCKCATKEECSKTC 49

RESULT 4

C75608 hypothetical protein - *Deinococcus radiodurans* (strain R1)
C;Species: *Deinococcus radiodurans*
C;Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 31-Mar-2000
C;Accession: C75608
R;White, O.; Eisen, J.A.; Heidelberg, J.F.; Hickey, E.K.; Peterson, J.D.; Dodson, R.J.;
M.; Shen, M.; Vamathevan, J.J.; Lam, P.; McDonald, L.; Utterback, T.; Zalewski, C.; Ma,
S.; Smith, H.O.; Venten, J.C.; Fraser, C.M.
Science 286, 1571-1577, 1999.
A;Title: Genome sequence of the radioresistant bacterium *Deinococcus radiodurans* R1.
A;Reference number: A75250; MUID:20036896
A;Accession: C75608
A;Molecule type: Preliminary
A;Residues: 1-243 <WHI>
A;Cross-references: GB:AE001862; GB:AE001825; NID:96460468; PIDN:AAF12318.1; PID:96460611
A;Experimental source: strain R1
C;Genetics:
A;Gene: DRA0128
A;Map position: 2

Query Match Score 28; DB 2; Length 243;
Best Local Similarity 23.5%; Pred. No. 63; Indels 0; Gaps 0;
Matches 4; Conservative 0; Mismatches 13; Indels 0; Gaps 0;

QY 2 CXXXXCXXXXCXXXXC 18
Db 214 CRWHSACRTARCTSIC 230

RESULT 5

T00708 violaxanthin de-epoxidase homolog F22013.3 - *Arabidopsis thaliana*
C;Species: *Arabidopsis thaliana* (mouse ear cress)
C;Date: 12-Feb-1999 #sequence_revision 12-Feb-1999 #text_change 22-Oct-1999
C;Accession: T00708
R;Shinn, P.; Buehrer, E.; Dewar, K.; Feng, J.; Kim, C.; Li, Y.; Sun, H.; Conway, A.; Cogenetics, A.; Ecker, J.R.
A;Description: Genomic sequence for *Arabidopsis thaliana* BAC F22013.
A;Reference number: 214200
A;Accession: T00708
A;Molecule type: DNA
A;Residues: 1-462 <SH1>

A;Cross-references: EMBL:ACC003981; NID:g3063438; PID:g3063441; GSPDB:GN00059; ATSP:F22013.3
A;Experimental source: cultivar Columbia
C;Genetics:
A;Gene: ATSP:F22013.3
A;Map Position: 1
A;Introns: 72/3; 128/2; 160/3; 292/2

Query Match Score 28; DB 2; Length 462;
Best Local Similarity 23.5%; Pred. No. 72; Indels 0; Gaps 0;
Matches 4; Conservative 0; Mismatches 13; Indels 0; Gaps 0;

QY 2 CXXXXCXXXXCXXXXC 18
Db 134 CIANPACAAANVACIQC 150

RESULT 6

T03750 violaxanthin de-epoxidase precursor - common tobacco
C;Species: *Nicotiana tabacum* (common tobacco)
C;Date: 24-Mar-1999 #sequence_revision 24-Mar-1999 #text_change 21-Jul-2000
C;Accession: T03750
R;Bugos, R.C.; Heiber, A.D.; Yamamoto, H.Y.
J. Biol. Chem. 273, 15321-15324, 1998
A;Title: Xanthophyll cycle enzymes are members of the lipocalin family, the first ide
A;Reference number: Z15054; MUID:98288256
A;Accession: T03750
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Function:
A;Residues: 1-478 <BUG>
A;Cross-references: EMBL:U34817; NID:g1463122; PIDN: AAC00311.1; PID:91463123
A;Experimental source: strain Xanthi; tissue-type leaf
C;Genetics:
A;Gene: TVDE1
A;Note: established as member of the lipocalin family
F;1-134/Domain: translat peptide (plastid) #status Predicted <TRP>
F;135-478/Product: violaxanthin de-epoxidase #status Predicted <MAT>

Query Match Score 28; DB 2; Length 478;
Best Local Similarity 23.5%; Pred. No. 73; Indels 0; Gaps 0;

QY 2 CXXXXCXXXXCXXXXC 18
Db 155 CIANPACAAANVACIQC 171

RESULT 7

T22664 hypothetical protein F54E4.1 - *Caenorhabditis elegans*
A;Reference number: Z19595
A;Accession: T22664
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-248 <WIL>
A;Cross-references: EMBL:Z79639; PIDN:CA801916.1; GSPDB:GN00028; CESP:F54E4.1
A;Experimental source: clone F54E4
C;Genetics:
A;Gene: CESP:F54E4.1
A;Map position: X
A;Introns: 31/1, 67/3; 135/3; 200/3; 354/2; 452/1; 495/3; 656/3; 785/2; 891/2; 1042/2
A;Status: translated from GB/EMBL/DDBJ
A;Residues: 1-462 <SH1>

R; Palmer, S.
Submitted to the EMBL Data Library, September 1995
A; Reference number: 219321
A; Accession: T20754
A; Status: preliminary; translated from GB/EMBL/DDJB
A; Molecule type: DNA
A; Residues: 1-572 <WIL>
A; Cross-references: EMBL:254270; PIDN:CAA91028.1; GSPDB:GN00028; CESP:F11C1.6
A; Experimental source: clone F11C1
C; Genetics:
A; Gene: CESP-F11C1.6
A; Map position: X
A; Map position: X
A; Introns: 39/3; 50/3; 87/1; 148/2; 190/1; 286/1; 377/3; 417/2; 499/2
C; Superfamily: steroid hormone receptor AddBP; erbA transforming protein homology

RESULT 8
SMKD1S
metallothionein 1 - mud crab
C;Species: Scylla serrata (mud crab)
C;Date: 29-Jul-1981 #sequence_revision 29-Jul-1981 #text_change 13-Sep-1996
C;Accession: A03283
R; Lerch, K.; Ammer, D.; Olafsson, R.W.
J. Biol. Chem. 257, 2420-2426, 1982
A;Title: Crab metallothionein. Primary structures of metallothioneins 1 and 2.
A; Reference number: A92363; MUID:82142340
A;Accession: A03283
A; Molecule type: protein
A; Residues: 1-58 <LER>
A; Note: the five Cys-X-Cys sequences are believed to be the principal metal-binding site
C;Superfamily: metallothioneine
C;Keywords: metal binding

Query Match 54.9%; Score 28; DB 2; Length 2948;
Best Local Similarity 23.5%; Pred. No. 1.1e+02; Indels 0; Gaps 0;
Matches 4; Conservative 0; Mismatches 13; Indels 0; Gaps 0;

Qy 2 CXXXXCXXXXCXXXXC 18
Db 733 CTLGTVCNPSNSCFISC 749

RESULT 9
T47330
hypothetical protein F7P3_10 - Arabidopsis thaliana
C;Species: Arabidopsis thaliana (mouse ear cress)
C;Date: 20-Apr-2000 #sequence_revision 20-Apr-2000 #text_change 20-Apr-2000
C;Accession: T47330
R; Vitali, D.; Lignori, R.; Flores, M.; Argirou, A.; De Simone, V.; Mewes, H.W.; Rudd, S.
A; Reference number: Z24461
A;Accession: T47330
A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-565 <VTP>
A; Cross-references: EMBL:AL138663
A; Experimental source: cultivar Columbia; BAC clone F7P3
C; Genetics:
A; Map position: 3
A; Introns: 169/2; 232/1; 276/2; 368/3; 444/3
A; Note: F7P3.10

Query Match 52.9%; Score 27; DB 2; Length 565;
Best Local Similarity 23.5%; Pred. No. 1.2e+02; Indels 0; Gaps 0;
Matches 4; Conservative 0; Mismatches 13; Indels 0; Gaps 0;

Qy 2 CXXXXCXXXXCXXXXC 18
Db 191 CSYYVACSYVACYIFC 207

RESULT 10
T20764
hypothetical protein F11C1.6 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 18-Feb-2000
C;Accession: T20764

Query Match 52.9%; Score 27; DB 2; Length 572;
Best Local Similarity 23.5%; Pred. No. 1.2e+02; Indels 0; Gaps 0;
Matches 4; Conservative 0; Mismatches 13; Indels 0; Gaps 0;

Qy 2 CXXXXCXXXXCXXXXC 18
Db 54 CSAEANCHVDRPRKRC 70

RESULT 11
A53102
alpha-2-macroglobulin receptor precursor - chicken
A; Cross-references: CP91; LDL receptor-related protein 1; low density lipoprotein receptor
N; Alternative names: CP91; LDL receptor-related protein 1; low density lipoprotein receptor
C;Species: Gallus gallus (chicken)
C; Date: 04-Sep-1998 #sequence_revision 04-Sep-1998 #text_change 22-Jun-1999
C;Accession: A53102
R; Nimpf, J.; Stifani, S.; Bilous, P.T.; Schneider, W.J.
J. Biol. Chem. 266, 212-219, 1994
A; Title: The somatic cell-specific low density lipoprotein receptor-related protein
A; Reference number: A53102; MUID:94103212
A;Accession: A53102
A; Status: preliminary
A; Molecule type: mRNA
A; Residues: 1-4543 <NLIM>
A; Cross-references: GB:X74904; NID:9438006; PIDN:CAA52870.1; PID:9438007
C;Complex: The alpha-2-macroglobulin receptor complex consists of noncovalently-associated protein.
C; Superfamily: alpha-2-macroglobulin receptor; EGF homology; LDL receptor ligand-bind
C; Keywords: beta-hydroxyasparagine; beta-hydroxyaspartic acid; calcium binding; glyco
F; 1-17/Domain: signal sequence #status predicted <SIG>
F; 18-394/2/Domain: alpha-2-macroglobulin receptor 51k chain #status predicted <SIG>
F; 18-394/2/394/3-453/3/Product: alpha 2-macroglobulin receptor #status predicted <MAT>
F; 29-66/Domain: LDL receptor ligand-binding repeat homology <LDL1>
F; 74-110/Domain: LDL receptor ligand-binding repeat homology <LDL2>
F; 117-150/Domain: EGF homology <EG1>
F; 156-190/Domain: EGF homology <EG2>
F; 200-241/Domain: LDL receptor YWTD-containing repeat homology <YW01>
F; 242-283/Domain: LDL receptor YWTD-containing repeat homology <YW02>
F; 294-336/Domain: LDL receptor YWTD-containing repeat homology <YW03>
F; 331-380/Domain: LDL receptor YWTD-containing repeat homology <YW04>
F; 381-422/Domain: LDL receptor YWTD-containing repeat homology <YW05>
F; 423-470/Domain: LDL receptor YWTD-containing repeat homology <YW06>
F; 480-521/Domain: EGF homology <EG3>
F; 573-615/Domain: LDL receptor YWTD-containing repeat homology <YW07>
F; 616-661/Domain: LDL receptor YWTD-containing repeat homology <YW08>
F; 662-712/Domain: LDL receptor YWTD-containing repeat homology <YW09>
F; 713-754/Domain: LDL receptor YWTD-containing repeat homology <YW10>
F; 755-797/Domain: LDL receptor YWTD-containing repeat homology <YW11>
F; 805-840/Domain: EGF homology <EG4>
F; 852-888/Domain: LDL receptor ligand-binding repeat homology <LDL3>
F; 893-929/Domain: LDL receptor ligand-binding repeat homology <LDL4>
F; 934-969/Domain: LDL receptor ligand-binding repeat homology <LDL5>
F; 974-1009/Domain: LDL receptor ligand-binding repeat homology <LDL6>
F; 1033-1049/Domain: LDL receptor ligand-binding repeat homology <LDL7>
F; 1102-1138/Domain: LDL receptor ligand-binding repeat homology <LDL8>
F; 1143-1180/Domain: LDL receptor ligand-binding repeat homology <LDL9>

F;1183-1219/Domain: EGF homology <EGF>
 F;1255-1259/Domain: EGF homology <EG5>
 F;1267-1306/Domain: LDL receptor YWTD-containing repeat homology <YW1.8>
 F;1324-1353/Domain: LDL receptor YWTD-containing repeat homology <YW1.3>
 F;1357-1443/Domain: LDL receptor YWTD-containing repeat homology <YW1.4>
 F;1444-1486/Domain: LDL receptor YWTD-containing repeat homology <YW1.5>
 F;1487-1529/Domain: LDL receptor YWTD-containing repeat homology <YW1.7>
 F;1538-1576/Domain: EGF homology <EG7>
 F;1611-1624/Domain: LDL receptor YWTD-containing repeat homology <YW1.8>
 F;1625-1667/Domain: LDL receptor YWTD-containing repeat homology <YW1.9>
 F;1668-1711/Domain: LDL receptor YWTD-containing repeat homology <YW2.0>
 F;1712-1751/Domain: LDL receptor YWTD-containing repeat homology <YW2.1>
 F;1752-1794/Domain: LDL receptor YWTD-containing repeat homology <YW2.2>
 F;1795-1842/Domain: LDL receptor YWTD-containing repeat homology <YW2.3>
 F;1846-1882/Domain: EGF homology <EG8>
 F;1930-1972/Domain: LDL receptor YWTD-containing repeat homology <YW2.4>
 F;1973-2015/Domain: LDL receptor YWTD-containing repeat homology <YW2.5>
 F;2016-2059/Domain: LDL receptor YWTD-containing repeat homology <YW2.6>
 F;2060-2101/Domain: LDL receptor YWTD-containing repeat homology <YW2.7>
 F;2155-2174/Domain: LDL receptor YWTD-containing repeat homology <YW2.8>
 F;2195-2199/Domain: EGF homology <EG9>
 F;2247-2287/Domain: LDL receptor YWTD-containing repeat homology <YW2.9>
 F;2338-2382/Domain: LDL receptor YWTD-containing repeat homology <YW3.0>
 F;2424-2467/Domain: LDL receptor YWTD-containing repeat homology <YW3.1>
 F;2476-2511/Domain: EGF homology <EG10>
 F;2518-2537/Domain: LDL receptor ligand-binding repeat homology <LDLb>
 F;2610-2594/Domain: LDL receptor YWTD-containing repeat homology <YW3.2>
 F;2699-2633/Domain: LDL receptor ligand-binding repeat homology <LDLb>
 F;2696-2682/Domain: LDL receptor ligand-binding repeat homology <LDLb>
 F;2697-2724/Domain: LDL receptor ligand-binding repeat homology <LDLb>
 F;2732-2767/Domain: LDL receptor ligand-binding repeat homology <LDLb>
 F;2781-2810/Domain: LDL receptor ligand-binding repeat homology <LDLb>
 F;2816-2851/Domain: LDL receptor ligand-binding repeat homology <LDLb>
 F;2892-2836/Domain: LDL receptor ligand-binding repeat homology <LDLb>
 F;2941-2977/Domain: EGF homology <EG11>
 F;3013-3018/Domain: EGF homology <EG12>
 F;3036-3065/Domain: LDL receptor YWTD-containing repeat homology <YW3.4>
 F;3111-3153/Domain: LDL receptor YWTD-containing repeat homology <YW3.5>
 F;3154-3197/Domain: LDL receptor YWTD-containing repeat homology <YW3.6>
 F;3198-3281/Domain: LDL receptor YWTD-containing repeat homology <YW3.7>
 F;3239-3289/Domain: LDL receptor YWTD-containing repeat homology <YW3.8>
 F;3291-3327/Domain: EGF homology <EG13>
 F;3331-3366/Domain: LDL receptor ligand-binding repeat homology <LDLb>
 F;3371-3405/Domain: LDL receptor ligand-binding repeat homology <LDLb>
 F;3410-3445/Domain: LDL receptor ligand-binding repeat homology <LDLb>
 F;3450-3485/Domain: LDL receptor ligand-binding repeat homology <LDLb>
 F;3491-3528/Domain: LDL receptor ligand-binding repeat homology <LDLb>
 F;3593-3627/Domain: EGF homology <EG14>
 F;3572-3606/Domain: LDL receptor YWTD-containing repeat homology <YW4.0>
 F;3610-3644/Domain: LDL receptor ligand-binding repeat homology <LDLb>
 F;3652-3728/Domain: LDL receptor ligand-binding repeat homology <LDLb>
 F;3738-3774/Domain: LDL receptor ligand-binding repeat homology <LDLb>
 F;3793-3820/Domain: EGF homology <EG15>
 F;3846-3858/Domain: EGF homology <EG15>
 F;3910-3909/Domain: LDL receptor YWTD-containing repeat homology <YW4.1>
 F;3943-3943/Domain: alpha-2-macroglobulin receptor 85K chain extracellular #status predicted <EXT>
 F;3943-4420/Domain: LDL receptor YWTD-containing repeat homology <YW4.2>
 F;4012-4055/Domain: LDL receptor YWTD-containing repeat homology <YW4.3>
 F;4056-4098/Domain: LDL receptor YWTD-containing repeat homology <YW4.4>
 F;4059-4141/Domain: LDL receptor YWTD-containing repeat homology <YW4.5>
 F;4199-4230/Domain: EGF homology <EG17>
 F;4235-4266/Domain: EGF homology <EG18>
 F;4241-4302/Domain: EGF homology <EG19>
 F;4307-4338/Domain: EGF homology <EG20>

E;4343-4373/Domain: EGF homology <EG21>
 F;4376-4408/Domain: EGF homology <EG22>
 F;4421-4443/Domain: transmembrane #status predicted <IMM>
 F;4444-4543/Domain: intracellular #status Predicted <INT>
 F;116-1338 187-276 359-448 731-926 1048-1153-1193-1216-1305-1509-1556-1573-1614-1
 3485-3559,3783,-383,-952,4074,4124,-4178/Binding site: carbohydrate (Asn) (covale
 F;168-2995/Modified site: erythro-beta-hydroxyasparagine (Asn) #status predicted
 F;2955/Modified site: erythro-beta-hydroxyaspartic acid (Asp) #status predicted

Query Match Score 27; DB 1; Length 4543;
 Best Local Similarity 23.5%; Pred. No. 1.8e+02;
 Matches 4; Conservative 0; Mismatches 13; Indels 0; Gaps 0;

Qy 2 CXXXXCXXXXXXCXXXC 18
 Db 150 CKDFDECTVYGTCSQTC 166

RESULT 12

S02392 alpha-2-macroglobulin receptor precursor - human
 N:Alternative names: CD91; LDL receptor-related protein 1; low density lipoprotein rece
 C:Species: Homo sapiens (man)
 C:Sequence-revision: 14-Aug-1998 #text_change 22-Jun-1999
 C:Accession: S02392; S30027; I39210; S12538
 R:Herz, J.; Hamann, U.; Roge, S.; Myklebost, O.; Gausepohl, H.; Stanley, K. K.
 EMBO J. 7, 4119-4127, 1988
 A:Title: Surface location and high affinity for calcium of a 500-kd liver membrane pr
 A:Reference number: S02392; MUID: 89210795
 A:Accession: S02392
 A:Status: nucleic acid sequence not shown
 A:Molecule type: mRNA
 A:Residues: 1-4544 <HER>
 A:Cross-references: EMBL:X13916; NID:934338; PIDN:CAA32112.1; PID:934339
 R:Kristensen, T.
 Submitted to the EMBL Data Library, October 1990
 A:Reference number: S30027
 A:Accession: S30027
 A:Molecule type: mRNA
 A:Residues: 3275-3864 <KR1>
 A:Cross-references: EMBL:X55077
 R:Herz, J.; Kowal, R.C.; Goldstein, J.L.; Brown, M.S.
 EMBO J. 9, 1763-1776, 1990
 A:Title: Proteolytic processing of the 600 kd low density lipoprotein receptor-related protein
 A:Reference number: S12538; MUID: 90692120
 A:Contents: annotation; site of proteolytic cleavage
 R:Kutsch, H.; Stein, J.; Herz, J.; Steinonen, K.K.
 Biochim. Biophys. Acta 1009, 229-236, 1989
 A:Title: Structure of the low-density lipoprotein receptor-related protein (LRP) prom
 A:Reference number: I37998; MUID: 90089395
 A:Accession: I37998
 A:Molecule type: protein
 A:Residues: 1-11 <RBS>
 A:Cross-references: EMBL:X15424; NID:934408; PIDN:CAA33464.1; PID:934409
 R:Strickland, D.K.; Ashcom, J.D.; Williams, S.; Burgess, W.H.; Migliorini, M.; Argrav
 J. Biol. Chem. 265, 17401-17404, 1990
 A:Title: Sequence identity between the alpha2-macroglobulin receptor and low density
 A:Reference number: A39210; MUID: 91009181
 A:Accession: A39210
 A:Status: preliminary
 A:Molecule type: protein
 A:Residues: 150-166,234-238, 'X', 240-245, 'X', 247-252, 'G', 686-695, 902-916,1096-1109; 'S'
 C:Genetics:
 A:Gene: GDB:LRP1; APR: A2MR
 A:Cross-references: GDB:111994; OMIM:107770
 A:Status: preliminary
 A:Molecule type: protein
 A:Residues: 12913-1-12913-3
 C:Complex: The alpha-2-macroglobulin receptor complex consists of noncovalently-associated protein (see PIR:A39757).
 C:Superfamily: Alpha-2-macroglobulin receptor ligand-bind
 C:Key-words: beta-hydroxyasparagine; beta-hydroxyspartic acid; calcium binding; glyco
 F;1-19/Domain: signal sequence #status Predicted <SIG>

F;20-3943/Product: alpha-2-macroglobulin receptor 515K chain #status predicted <515K>
 F;27-104/Domain: LDL receptor ligand-binding repeat homology <LDL1>
 F;72-108/Domain: LDL receptor ligand-binding repeat homology <LDL2>
 F;145-188/Domain: EGF homology <EG2>
 F;198-239/Domain: LDL receptor YWTD-containing repeat homology <YW01>
 F;292-334/Domain: LDL receptor YWTD-containing repeat homology <YW02>
 F;379-420/Domain: LDL receptor YWTD-containing repeat homology <YW03>
 F;421-468/Domain: LDL receptor YWTD-containing repeat homology <YW04>
 F;478-519/Domain: EGF homology <EG3>
 F;571-613/Domain: LDL receptor YWTD-containing repeat homology <YW05>
 F;614-659/Domain: LDL receptor YWTD-containing repeat homology <YW06>
 F;660-710/Domain: LDL receptor YWTD-containing repeat homology <YW07>
 F;711-752/Domain: LDL receptor YWTD-containing repeat homology <YW08>
 F;753-799/Domain: LDL receptor YWTD-containing repeat homology <YW11>
 F;809-840/Domain: EGF homology <EG4>
 F;854-890/Domain: LDL receptor ligand-binding repeat homology <LDL3>
 F;936-971/Domain: LDL receptor ligand-binding repeat homology <LDL4>
 F;976-1011/Domain: LDL receptor ligand-binding repeat homology <LDL5>
 F;1062-1097/Domain: LDL receptor ligand-binding repeat homology <LDI8>
 F;1104-1140/Domain: LDL receptor ligand-binding repeat homology <LDL9>
 F;1145-1182/Domain: LDL receptor ligand-binding repeat homology <LDLA>
 F;1185-1221/Domain: EGF homology <EG5>
 F;1227-1261/Domain: EGF homology <EG6>
 F;1269-1308/Domain: LDL receptor YWTD-containing repeat homology <YW12>
 F;1309-1355/Domain: LDL receptor YWTD-containing repeat homology <YW13>
 F;1356-1398/Domain: LDL receptor YWTD-containing repeat homology <YW14>
 F;1446-1488/Domain: LDL receptor YWTD-containing repeat homology <YW15>
 F;1540-1531/Domain: LDL receptor YWTD-containing repeat homology <YW17>
 F;1583-1626/Domain: LDL receptor YWTD-containing repeat homology <YW18>
 F;1670-1713/Domain: LDL receptor YWTD-containing repeat homology <YW20>
 F;1714-1753/Domain: LDL receptor YWTD-containing repeat homology <YW21>
 F;1754-1796/Domain: LDL receptor YWTD-containing repeat homology <YW22>
 F;1797-1846/Domain: LDL receptor YWTD-containing repeat homology <EG68>
 F;1850-1886/Domain: EGF homology <EG6>
 F;1934-1976/Domain: LDL receptor YWTD-containing repeat homology <YW24>
 F;1977-2019/Domain: LDL receptor YWTD-containing repeat homology <YW25>
 F;2020-2063/Domain: LDL receptor YWTD-containing repeat homology <YW26>
 F;2064-2105/Domain: LDL receptor YWTD-containing repeat homology <YW27>
 F;2106-2151/Domain: LDL receptor YWTD-containing repeat homology <YW28>
 F;2159-2194/Domain: EGF homology <EG59>
 F;2199-2241/Domain: LDL receptor YWTD-containing repeat homology <YW29>
 F;2253-2294/Domain: LDL receptor YWTD-containing repeat homology <YW30>
 F;2389-2429/Domain: LDL receptor YWTD-containing repeat homology <YW31>
 F;2430-2473/Domain: LDL receptor YWTD-containing repeat homology <YW32>
 F;2482-2517/Domain: EGF homology <EG10>
 F;2524-2561/Domain: LDL receptor ligand-binding repeat homology <LDL2>
 F;2605-2639/Domain: LDL receptor ligand-binding repeat homology <LDL3>
 F;2652-2688/Domain: LDL receptor ligand-binding repeat homology <LDL4>
 F;2696-2730/Domain: LDL receptor ligand-binding repeat homology <LDL5>
 F;2734-2769/Domain: LDL receptor ligand-binding repeat homology <LDL6>
 F;2774-2812/Domain: LDL receptor ligand-binding repeat homology <LDL7>
 F;2818-2853/Domain: LDL receptor ligand-binding repeat homology <LDL8>
 F;2858-2897/Domain: LDL receptor ligand-binding repeat homology <LDL9>
 F;2904-2939/Domain: LDL receptor ligand-binding repeat homology <LDLA>
 F;2944-2980/Domain: EGF homology <EG11>
 F;2986-3021/Domain: EGF homology <EG12>
 F;3029-3068/Domain: LDL receptor YWTD-containing repeat homology <YW34>
 F;3069-3113/Domain: LDL receptor YWTD-containing repeat homology <YW35>
 F;3114-3156/Domain: LDL receptor YWTD-containing repeat homology <YW36>
 F;3201-3241/Domain: LDL receptor YWTD-containing repeat homology <YW37>
 F;3242-3284/Domain: LDL receptor YWTD-containing repeat homology <YW38>
 F;3294-3330/Domain: EGF homology <EG13>

F;3334-3369/Domain: LDL receptor ligand-binding repeat homology <LDLL1>
 F;3374-3408/Domain: LDL receptor ligand-binding repeat homology <LDLL2>
 F;3413-3448/Domain: LDL receptor ligand-binding repeat homology <LDLL3>
 F;3453-3487/Domain: LDL receptor ligand-binding repeat homology <LDLL4>
 F;3494-3531/Domain: LDL receptor ligand-binding repeat homology <LDLL5>
 F;3538-3570/Domain: LDL receptor ligand-binding repeat homology <LDLL6>
 F;3613-3647/Domain: LDL receptor ligand-binding repeat homology <LDLL7>
 F;3654-3690/Domain: LDL receptor ligand-binding repeat homology <LDLL8>
 F;3695-3731/Domain: LDL receptor ligand-binding repeat homology <LDLL9>
 F;3741-3776/Domain: LDL receptor ligand-binding repeat homology <LDLL10>
 F;3828-3882/Domain: EGF homology <EG14>
 F;3868-3911/Domain: LDL receptor YWTD-containing repeat homology <YW40>
 F;3912-3967/Domain: LDL receptor YWTD-containing repeat homology <YW41>
 F;3944-4544/Product: alpha-2-macroglobulin receptor 85K chain #status predicted <85K>
 F;3944-4420/Domain: 85K chain extracellular #status predicted <EXT>
 F;4012-4012/Domain: LDL receptor YWTD-containing repeat homology <YW42>
 F;4013-4056/Domain: LDL receptor YWTD-containing repeat homology <YW43>
 F;4057-4109/Domain: LDL receptor YWTD-containing repeat homology <YW44>
 F;4100-4142/Domain: LDL receptor YWTD-containing repeat homology <YW45>
 F;4151-4187/Domain: EGF homology <EG16>
 F;4200-4231/Domain: EGF homology <EG17>
 F;4236-4267/Domain: EGF homology <EG18>
 F;4272-4303/Domain: EGF homology <EG19>
 F;4308-4339/Domain: EGF homology <EG20>
 F;4348-4374/Domain: EGF homology <EG21>
 F;4377-4408/Domain: EGF homology <EG22>
 Query Match Score 27; DB 1; Length 4544;
 Best Local Similarity 23.5%; Status Predicted <INT>
 Matches 4; Conservative 0; Mismatches 13; Indels 0; Gaps 0;

Qy 2 CXXXXXXXXXXXXXXX 18
 Db 2980 CADVDECSTTFPCSQRC 2996

RESULT 13
 S25111
 A:Submitted to the EMBL Data Library, July 1992
 A:Reference number: S25111
 A:Accession: S25111
 A:Molecule type: mRNA
 A:Residues: 1-4545 5 <VAN1>
 A:Cross references: EMBL: X67469; NID: g49941; PID: CAA47817_1; PID: g49942
 A:Species: Mus musculus (house mouse)
 C:Species: Mus musculus (house mouse)
 C:Date: 04-Sep-1998 #sequence_revision 04-Sep-1998 #text_change 22-Jun-1999
 C:Accession: S25111; S32554
 A:Accession: S25111
 A:Status: nucleic acid sequence not shown
 A:Molecule type: mRNA
 A:Residues: 1-28416-4453 <VAN2>
 A:Cross references: EMBL: X67469
 C:Complex: The alpha-2-macroglobulin receptor complex consists of noncovalently-associated protein (see PIR: JX081).
 C:Superfamily: alpha-2-macroglobulin receptor; EGF homology; LDL receptor ligand-binding protein.
 C:Key words: beta-hydroxyasparagine; beta-hydroxyspartic acid; calcium binding; glyco

F;1-19/Domain: signal sequence #status predicted <SIG>
 F;20-3344-3945-4545/Product: alpha-2-macroglobulin receptor #status predicted <MAT>

F:20-3944/Domain: alpha-2-macroglobulin receptor 515K chain #status predicted <515K>
 F:28-65/Domain: LDL receptor ligand-binding repeat homology <LDL1>
 F:73-109/Domain: LDL receptor ligand-binding repeat homology <LDL2>
 F:116-149/Domain: EGF homology <EG1>
 F:155-189/Domain: EGF homology <EG2>
 F:199-240/Domain: LDL receptor YWTD-containing repeat homology <YW02>
 F:293-335/Domain: LDL receptor YWTD-containing repeat homology <YW03>
 F:336-379/Domain: LDL receptor YWTD-containing repeat homology <YW04>
 F:422-469/Domain: LDL receptor YWTD-containing repeat homology <YW05>
 F:479-520/Domain: EGF homology <EG3>
 F:615-664/Domain: LDL receptor YWTD-containing repeat homology <YW07>
 F:661-711/Domain: LDL receptor YWTD-containing repeat homology <YW09>
 F:712-753/Domain: LDL receptor YWTD-containing repeat homology <YW10>
 F:754-800/Domain: LDL receptor YWTD-containing repeat homology <YW11>
 F:808-843/Domain: EGF homology <EG4>
 F:855-912/Domain: LDL receptor ligand-binding repeat homology <LDL3>
 F:896-932/Domain: LDL receptor ligand-binding repeat homology <LDL4>
 F:977-1012/Domain: LDL receptor ligand-binding repeat homology <LDL5>
 F:1016-1052/Domain: LDL receptor ligand-binding repeat homology <LDL7>
 F:1063-1098/Domain: LDL receptor ligand-binding repeat homology <LDL8>
 F:1105-1141/Domain: LDL receptor ligand-binding repeat homology <LDL9>
 F:1146-1183/Domain: LDL receptor ligand-binding repeat homology <LDL10>
 F:1186-1222/Domain: EGF homology <EG5>
 F:1228-1262/Domain: EGF homology <EG6>
 F:1270-1309/Domain: LDL receptor YWTD-containing repeat homology <YW12>
 F:1310-1356/Domain: LDL receptor YWTD-containing repeat homology <YW13>
 F:1357-1399/Domain: LDL receptor YWTD-containing repeat homology <YW14>
 F:1447-1489/Domain: LDL receptor YWTD-containing repeat homology <YW15>
 F:1490-1532/Domain: LDL receptor YWTD-containing repeat homology <YW17>
 F:1541-1579/Domain: EGF homology <EG7>
 F:1584-1627/Domain: LDL receptor YWTD-containing repeat homology <YW18>
 F:1671-1714/Domain: LDL receptor YWTD-containing repeat homology <YW20>
 F:1715-1754/Domain: LDL receptor YWTD-containing repeat homology <YW21>
 F:1798-1847/Domain: LDL receptor YWTD-containing repeat homology <EG8>
 F:1851-1887/Domain: EGF homology <EG9>
 F:1935-1977/Domain: LDL receptor YWTD-containing repeat homology <YW22>
 F:1978-2020/Domain: LDL receptor YWTD-containing repeat homology <YW23>
 F:2021-2064/Domain: LDL receptor YWTD-containing repeat homology <YW24>
 F:2065-2106/Domain: LDL receptor YWTD-containing repeat homology <YW26>
 F:2107-2152/Domain: LDL receptor YWTD-containing repeat homology <YW28>
 F:2160-2195/Domain: EGF homology <EG9>
 F:2200-2242/Domain: LDL receptor YWTD-containing repeat homology <YW29>
 F:2254-2295/Domain: LDL receptor YWTD-containing repeat homology <YW30>
 F:2339-2430/Domain: LDL receptor YWTD-containing repeat homology <YW31>
 F:2431-2474/Domain: EGF homology <EG10>
 F:2525-2562/Domain: LDL receptor ligand-binding repeat homology <LDL1>
 F:2567-2601/Domain: LDL receptor ligand-binding repeat homology <LDL2>
 F:2697-2731/Domain: LDL receptor ligand-binding repeat homology <LDL3>
 F:2735-2781/Domain: LDL receptor ligand-binding repeat homology <LDL4>
 F:2819-2854/Domain: LDL receptor ligand-binding repeat homology <LDL5>
 F:2859-2898/Domain: LDL receptor ligand-binding repeat homology <LDL6>
 F:2905-2940/Domain: LDL receptor ligand-binding repeat homology <LDL7>
 F:2945-2981/Domain: EGF homology <EG11>
 F:2987-3022/Domain: EGF homology <EG12>
 F:3030-3069/Domain: LDL receptor YWTD-containing repeat homology <YW34>
 F:3115-3157/Domain: LDL receptor YWTD-containing repeat homology <YW35>
 F:3158-3201/Domain: LDL receptor YWTD-containing repeat homology <YW37>
 F:3243-3285/Domain: LDL receptor YWTD-containing repeat homology <YW38>
 F:3295-3331/Domain: EGF homology <EG13>

E:3335-3370/Domain: LDL receptor ligand-binding repeat homology <LDL1>
 F:3375-3409/Domain: LDL receptor ligand-binding repeat homology <LDL1>
 F:3414-3449/Domain: LDL receptor ligand-binding repeat homology <LDL2>
 F:3454-3490/Domain: LDL receptor ligand-binding repeat homology <LDL2>
 F:3495-3532/Domain: LDL receptor ligand-binding repeat homology <LDL2>
 F:3531-3571/Domain: LDL receptor ligand-binding repeat homology <LDL2>
 F:3614-3610/Domain: LDL receptor ligand-binding repeat homology <LDL2>
 F:3614-3618/Domain: LDL receptor ligand-binding repeat homology <LDL2>
 F:3655-3691/Domain: LDL receptor ligand-binding repeat homology <LDL2>
 F:3696-3732/Domain: LDL receptor ligand-binding repeat homology <LDL2>
 F:3742-3777/Domain: LDL receptor ligand-binding repeat homology <LDL2>
 F:3786-3823/Domain: EGF homology <EG14>
 F:3829-3861/Domain: EGF homology <EG15>
 F:3869-3912/Domain: LDL receptor YWTD-containing repeat homology <YW40>
 F:3913-3970/Domain: LDL receptor YWTD-containing repeat homology <YW41>
 F:3945-4545/Domain: alpha-2-macroglobulin receptor 85K chain #status predicted <85K>
 F:3945-4421/Domain: 85K chain #status predicted <EXT>
 F:3971-4013/Domain: LDL receptor YWTD-containing repeat homology <YW42>
 F:4014-4057/Domain: LDL receptor YWTD-containing repeat homology <YW43>
 F:4058-4100/Domain: LDL receptor YWTD-containing repeat homology <YW44>
 F:4101-4143/Domain: LDL receptor YWTD-containing repeat homology <YW45>
 F:4152-4183/Domain: EGF homology <EG16>
 F:4201-4232/Domain: EGF homology <EG17>
 F:4273-4268/Domain: EGF homology <EG18>
 F:4309-4340/Domain: EGF homology <EG19>
 F:4345-4375/Domain: EGF homology <EG21>
 F:4378-4405/Domain: transmembrane #status predicted <TM>
 F:4446-4454/Domain: intracellular #status predicted <INT>
 F:167,2999/Modified site: erythro-beta-hydroxyaspartic acid (Asp) #status predicted
 F:4076,4126,4279/Binding site: carboxylate (Asn) (covalent)

Query Match Score 52.9%; Best Local Similarity 23.5%; Matches 4; Conservate 0; Gaps 0;

Qy 2 CXXXXCXXXXCXXXCXXC 18
 Db 2981 CADLDECSTTFPCSQLC 2997

RESULT 14

SRKD2S metallothionein 2 - mud crab
 C.Species: Scylla serrata (mud crab)
 C.Date: 19-Feb-1984 #sequence_revision 19-Feb-1984 #text_change 13-Sep-1996
 C;Accession: A03284
 R.Lerch, K.; Aumer, D.; Olafsson, R.W.
 J.BioI., Chem. 257, 2420-2426, 1982
 A.Title: Crab metallothionein. Primary structures of metallothioneins 1 and 2.
 A;Accession number: A92363; MUID: 82142340
 A;Molecule type: protein
 A;Residues: 1-182
 C;Superfamily: metallothionein
 C;Keywords: metal binding

Query Match Score 26; Best Local Similarity 23.5%; Matches 4; Conservate 0; Gaps 0;

Qy 2 CXXXXCXXXXCXXXC 18
 Db 33 CSSGCKCNREDCRKTC 49

RESULT 15

A37039 metallothionein 1 - American lobster

C; Species: Homarus americanus (American lobster)
C; Date: 31-Jan-1992 #sequence_revision 31-Jan-1992 #text_change 12-Apr-1995
C; Accession: A37039
R; Brouwer, M.; Winge, D.R.; Gray, W.R.
J. Inorg. Biochem. 35, 289-303, 1989
A; Title: Structural and functional diversity of copper-metallothioneins from the Americas
A; Reference number: A37039; MUID:89215793
A; Accession: A37039
A; Status: preliminary
A; Molecule type: protein
A; Residues: 1-58 <BRO>
C; Superfamily: metallothionein

Query Match 51.0%; Score 26; DB 2; Length 58;
Best Local Similarity 23.5%; Pred No. 1.e+02;
Matches 4; Conservative 0; Mismatches 13; Indels 0; Gaps 0;
QY 2 CXXXXCXXXCXXC 18
Db 33 C¹R²S³G⁴C⁵K⁶P⁷S⁸K⁹D¹⁰E¹¹C¹²A¹³T¹⁴I¹⁵C¹⁶ 49

Search completed: February 13, 2002, 10:11:24
Job time: 112 sec

